

*Entry is approval for paragraph 18. 12/12/06 JPL*

Application No. 10/720,123  
Attorney Docket No. 2557-000191/US

**AMENDMENTS TO THE SPECIFICATION**

*Please replace paragraph [0014] with the following new paragraph [0014].*

~~[0014] FIG. 1 is a block diagram illustrating a structure of a semiconductor device with a speed binning test circuit that performs a speed-binning test, according to an exemplary embodiment of the present invention. Referring to FIG. 1, the semiconductor device, which in FIG. 1 is embodied as a chip, for example, may include a plurality of signal input/output (I/O) pins 101-108, which are the same as those installed in a general semiconductor device, for example. Signals may be input to the signal I/O pins from a core circuit 110, and/or signals may be output from the signal I/O pins to the core circuit 110. The core circuit 110 performs given functions using its logic circuit and receives/outputs signals from/to the plurality of signal I/O pins.~~

*Please replace paragraph [0018] with the following new paragraph [0018].*

~~[0018] FIG. 2 is an exemplary block diagram of the first through fourth speed correlation circuits 170 through 150 shown in FIG. 1. Referring to FIG. 2, the first through fourth speed correlation circuits 120 through 150 are installed in a chain structure around the boundary of core circuit 110 and include given (known or determined in advance) unit delay circuits, i.e., inverter circuits. However, the unit delay circuits according to the exemplary embodiments of the present invention are not limited to inverter circuits. The unit delay circuits may be embodied as any circuit capable of inverting input signals and outputting an inverted signal, and/or as buffers capable of outputting signals having the same phases as signals input thereto. However, if the unit delay circuits are buffers, at least one of the unit delay circuits should be an inverter circuit so that the chain structure can operate as a ring oscillator.~~

*Entry is approved, 12/11/06 JPL*



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**AMENDMENTS TO THE SPECIFICATION**

*Please replace paragraph [0014] with the following new paragraph [0014].*

[0014] FIG. 1 is a block diagram illustrating a structure of a semiconductor device with a speed binning test circuit that performs a speed-binning test, according to an exemplary embodiment of the present invention. Referring to FIG. 1, the semiconductor device, which in FIG. 1 is embodied as a chip, for example, may include a plurality of signal input/output (I/O) pins 101-108, which are the same as those installed in a general semiconductor device, for example. Signals may be input to the signal I/O pins 101-108 from a core circuit 110, and/or signals may be output from the signal I/O pins 101-108 to the core circuit 110. The core circuit 110 performs given functions using its logic circuit and receives/outputs signals from/to the plurality of signal I/O pins 101-108.

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